

What is claimed is:

1. A handheld aerosolization apparatus comprising:
a housing defining a chamber having a plurality of air inlets, the chamber
5 being sized to receive a receptacle which contains an aerosolizable pharmaceutical formulation;
a shield which covers at least one but not all of the air inlets, whereby the
shield prevents blockage of the at least one air inlet by a user grasping the apparatus; and
an end section associated with the housing, the end section sized and shaped
to be received in a user's mouth or nose so that the user may inhale through the end section to
10 inhale aerosolized pharmaceutical formulation that has exited the receptacle.
2. An apparatus according to claim 1 wherein the shield is a portion of the end
section.
- 15 3. An apparatus according to claim 1 wherein the end section is removably
connected to the housing and wherein the end section may be removed from the housing to provide
access to the chamber.
- 20 4. An apparatus according to claim 3 wherein the shield is a portion of the end
section.
5. An apparatus according to claim 1 wherein the shield comprises at least two
covering portions, each covering portion covering at least one inlet.
- 25 6. An apparatus according to claim 5 wherein there are two covering portions
and wherein the two covering portions are diametrically opposed.
7. An apparatus according to claim 5 wherein the at least two covering portions
are separated by open portions.

8. An apparatus according to claim 7 wherein the open portions provide direct access to at least one inlet.

5 9. An apparatus according to claim 1 wherein the shield extends longitudinally along the apparatus.

10 10. An apparatus according to claim 1 wherein the receptacle is a capsule and further comprising a puncturing mechanism in the housing for creating one or more openings in the capsule.

11. An apparatus according to claim 10 wherein the puncture member is adapted to puncture only one end of the capsule.

15 12. An apparatus according to claim 10 wherein the chamber is elongated and wherein the capsule is received lengthwise within the elongated chamber.

13. An apparatus according to claim 1 wherein the inlet is shaped to create a swirling airflow within the chamber.

20 14. A handheld aerosolization apparatus comprising:
a housing defining a chamber having a plurality of air inlets, the chamber being sized to receive a receptacle which contains an aerosolizable pharmaceutical formulation;
a shield which covers a portion of but not all of at least one of the air inlets;
and
25 an end section associated with the housing, the end section sized and shaped to be received in a user's mouth or nose so that the user may inhale through the end section to inhale aerosolized pharmaceutical formulation that has exited the receptacle.

30 15. An apparatus according to claim 14 wherein the shield is a portion of the end section.

16. An apparatus according to claim 14 wherein the end section is removably connected to the housing and wherein the end section may be removed from the housing to provide access to the chamber.

5 17. An apparatus according to claim 16 wherein the shield is a portion of the end section.

18. An apparatus according to claim 14 wherein the inlet is shaped to create a swirling airflow within the chamber.

10 19. A handheld aerosolization apparatus comprising:
a housing defining a chamber having one or more air inlets, the chamber being sized to receive a receptacle which contains an aerosolizable pharmaceutical formulation;
a shield extending around only a portion of transverse circumference of the
15 housing, the shield covering at least one air inlets, whereby the shield prevents blockage of the at least one air inlet by a user grasping the apparatus; and
an end section associated with the housing, the end section sized and shaped to be received in a user's mouth or nose so that the user may inhale through the end section to inhale aerosolized pharmaceutical formulation that has exited the receptacle.

20 20. An apparatus according to claim 19 wherein the shield is a portion of the end section.

25 21. An apparatus according to claim 19 wherein the end section is removably connected to the housing and wherein the end section may be removed from the housing to provide access to the chamber.

22. An apparatus according to claim 21 wherein the shield is a portion of the end section.

30 23. An apparatus according to claim 19 wherein the inlet is shaped to create a

swirling airflow within the chamber.

24. A method of aerosolizing a pharmaceutical formulation, the method comprising:

5 providing an aerosolizable pharmaceutical formulation in a chamber, the chamber having a plurality of air inlets;

shielding at least one but not all of the air inlets from being blocked by a user grasping the chamber;

10 aerosolizing the pharmaceutical formulation by flowing air through the chamber; and

administering the aerosolized pharmaceutical formulation to the respiratory tract of a user during the user's inhalation.

15 25. A method according to claim 24 wherein the pharmaceutical formulation is contained within a capsule and further comprising the step of inserting the capsule into the chamber.

20 26. A method according to claim 25 further comprising puncturing the capsule within the chamber.

27. A method according to claim 24 wherein the user's inhalation causes the air to flow through the chamber.

25 28. A method of aerosolizing a pharmaceutical formulation, the method comprising:

providing an aerosolizable pharmaceutical formulation in a chamber, the chamber having one or more air inlets;

shielding only a portion of at least one of the air inlets from being blocked by a user grasping the chamber;

30 aerosolizing the pharmaceutical formulation by flowing air through the chamber; and

administering the aerosolized pharmaceutical formulation to the respiratory tract of a user during the user's inhalation.

29. A method according to claim 28 wherein the pharmaceutical formulation is contained within a capsule and further comprising the step of inserting the capsule into the chamber.

30. A method according to claim 29 further comprising puncturing the capsule within the chamber.

31. A method according to claim 28 wherein the user's inhalation causes the air to flow through the chamber.